NFPA® 1250

Recommended Practice in Fire and Emergency Service Organization Risk Management

2015 Edition

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An International Codes and Standards Organization

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NFPA® 1250

Recommended Practice in

Fire and Emergency Service Organization Risk Management

2015 Edition

This edition of NFPA 1250, *Recommended Practice in Fire and Emergency Service Organization Risk Management*, was prepared by the Technical Committee on Emergency Service Organization Risk Management. It was issued by the Standards Council on November 11, 2014, with an effective date of December 1, 2014, and supersedes all previous editions.

This edition of NFPA 1250 was approved as an American National Standard on December 1, 2014.

Origin and Development of NFPA 1250

In 1994, a request was sent to NFPA's Standards Council to consider establishing a project regarding fire service risk management. At that time, the Technical Committee on Fire Service Occupational Safety was including language regarding risk management in the revisions to NFPA 1500, *Standard on Fire Department Occupational Safety and Health Program*. The council also had an additional request from the Technical Committee on Fire Service Training, which had a proposal to address risk management from a training perspective.

At the 1995 NFPA Annual Meeting, a task group meeting was held with members of both technical committee projects, the proponents of this project, and members of the Standards Council. A report was then prepared and sent to the Standards Council for its July 1995 meeting, at which it approved the development of a new project on fire services administrative risk management. A startup committee was appointed, with Dr. William Jenaway as chair.

The committee worked for three years to develop a recommended practice that expanded on the requirements contained in Chapter 2 of the 1992 edition of NFPA 1500. During the development, the technical committee decided to request of the Standards Council a title and scope change that would reflect all emergency services, not just the fire department. The council granted this request for changes in July 1997.

The first edition of NFPA 1250 outlined an entire risk management program that an emergency service department could use as a model. It also provided guidance as to how such a plan can also be a component of the jurisdiction's risk management plan. Appendixes were added to assist the user with specific references, flow charts, and sample agreements. The committee felt that NFPA 1250 would assist users and enforcers alike in reducing the risk to individuals, the emergency services, and the jurisdiction.

For the 2004 edition, the document was revised to comply with the NFPA *Manual of Style* and to update some references.

The title of the 2010 edition was changed to include *fire*, to eliminate confusion regarding to whom the document applies.

For the 2015 edition, the committee has updated definitions and included the development of a risk management plan to protect the assets and minimize the potential liability of the fire and emergency service organization. The committee also has added to the risk assessment plan presumptive exposure and financial, disability, and medical considerations. This edition includes a new annex, Risk Management Plan Factors (Annex D).

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NOTE: Membership on a committee shall not in and of itself constitute an endorsement of the Association or any document developed by the committee on which the member serves.

Committee Scope: This Committee shall have primary responsibility for documents on emergency service organizations structure, operations, and risk management.

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2015 Edition

NOTICE: An asterisk (*) following the number or letter designating a paragraph indicates that explanatory material on the paragraph can be found in Annex A.

A reference in brackets [ ] following a section or paragraph indicates material that has been extracted from another NFPA document. As an aid to the user, the complete title and edition of the source documents for extracts in the recommendations sections of this document are given in Chapter 2 and those for extracts in the informational sections are given in Annex E. Extracted text may be edited for consistency and style and may include the revision of internal paragraph references and other references as appropriate. Requests for interpretations or revisions of extracted text should be sent to the technical committee responsible for the source document.

Information on referenced publications can be found in Chapter 2 and Annex E.

Chapter 1 Administration

1.1 Scope. This recommended practice establishes minimum criteria to develop, implement, or evaluate a fire and emergency service organization (FESO) risk management program for effective risk identification, control, and financing.

1.2 Purpose.

1.2.1 This recommended practice is intended to provide those with the responsibility for risk management with a process to control or minimize the impact of detrimental events on the FESO and governing authority.

1.2.2 This goal is achieved by providing a model for developing, implementing, and evaluating a risk management program for the FESO.

1.3 Application.

1.3.1 This recommended practice discusses the concept and application of risk management as used in business and municipal organizations today and its role within a fire and emergency service organization.

1.3.2 Relationship to Other Standards. The recommendations in this recommended practice set forth a risk management model to be used in any aspect of emergency service operation to ensure integration with the financial, loss management, and administrative processes of the organization's managing body.

Chapter 2 Referenced Publications

2.1 General. The documents or portions thereof listed in this chapter are referenced within this recommended practice and should be considered part of the recommendations of this document.

2.2 NFPA Publications. (Reserved)

2.3 Other Publications.

Merriam-Webster's Collegiate Dictionary, 11th edition, Merriam-Webster, Inc., Springfield, MA, 2003.

2.4 References for Extracts in Recommendations Sections.

NFPA 1143, *Standard for Wildland Fire Management,* 2014 edition.

NFPA 1201, *Standard for Providing Fire and Emergency Services to the Public,* 2015 edition.

NFPA 1451, *Standard for a Fire Service and Emergency Vehicle Operations Training Program,* 2013 edition.

NFPA 5000®, Building Construction and Safety Code®, 2015 edition.

Chapter 3 Definitions

3.1 General. The definitions contained in this chapter apply to the terms used in this recommended practice. Where terms are not defined in this chapter or within another chapter, they should be defined using their ordinarily accepted meanings within the context in which they are used. *Merriam-Webster's Collegiate Dictionary*, 11th edition, is the source for the ordinarily accepted meaning.

3.2 NFPA Official Definitions.

3.2.1* Approved. Acceptable to the authority having jurisdiction.

3.2.2* Authority Having Jurisdiction (AHJ). An organization, office, or individual responsible for enforcing the requirements of a code or standard, or for approving equipment, materials, an installation, or a procedure.

3.2.3 Recommended Practice. A document that is similar in content and structure to a code or standard but that contains only nonmandatory provisions using the word "should" to indicate recommendations in the body of the text.

3.2.4 Should. Indicates a recommendation or that which is advised but not required.

3.2.5 Standard. An NFPA Standard, the main text of which contains only mandatory provisions using the word "shall" to indicate requirements and that is in a form generally suitable for mandatory reference by another standard or code or for adoption into law. Nonmandatory provisions are not to be considered a part of the requirements of a standard and shall be located in an appendix, annex, footnote, informational note, or other means as permitted in the NFPA Manuals of Style. When used in a generic sense, such as in the phrase "standards development process" or "standards development activities," the term "standards" includes all NFPA Standards, including Codes, Standards, Recommended Practices, and Guides.

3.3 General Definitions.

3.3.1 Captive. A firm or group that forms an insurance company for their own purposes.

3.3.2 Claims Analyst. An internal or external person (depending on risk financing processes being used) expected to investigate the claim, evaluate it, prepare a position, ensure the appropriate "network" is involved, and, if necessary, begin negotiation of a settlement.

3.3.3 Claims Made. An insurance policy where the claim is made during the policy period, and where the occurrence might or might not have been during the policy period.

3.3.4 Claims Occurrence. An insurance policy where the loss occurs during the policy period, and the claim can be made at any time.

3.3.5 Detrimental Event. Circumstance(s) that produces or threatens to produce undesirable consequences to persons, property, or the environment that might ultimately be measured in terms of economic or financial loss.

3.3.6* Emergency Services System. A method of providing services through a planned and organized network of physical and human resources utilizing mandates with a defined mission.

3.3.7 Exposure. The state of being exposed to loss because of some hazard or contingency.

3.3.8 FESO. See 3.3.9.

3.3.9* Fire and Emergency Service Organization (FESO). Any public, private, governmental, or military organization that provides emergency response, fire suppression, and related activities, whether for profit or government owned and operated. [**1201,** 2015]

3.3.10 Frequency. The number of occurrences per unit time at which observed events occur or are predicted to occur.

3.3.11 Hazard. A condition, situation, attitude, or action that creates or increases expected loss frequency or severity.

3.3.12 Incident. An occurrence, either human-caused or a natural phenomenon, that requires action or support by emergency services personnel to prevent or minimize loss of life or damage to property and/or natural resources. [**1143,** 2014]

3.3.13 Insurance. Transfer by contract of funds (premium) in exchange for payment on losses that might occur.

3.3.14 Loss. The unintentional decline in or disappearance of value arising from an incident.

3.3.15 Mutual Aid Agreement. A pre-arranged agreement developed between two or more entities to render assistance to the parties of the agreement.

3.3.16 Peril. An active cause of loss, such as a hurricane, fire, or accident.

3.3.17 Person. Any individual, firm, copartnership, corporation, company, association, or joint-stock association, including any trustee, receiver, assignee, or personal representative thereof. [**5000,** 2015]

3.3.18 Policy. A legal agreement for transferring risk that defines what will be paid for, in the event of a defined loss, in exchange for a defined amount of money (premium).

3.3.19 Pool. To join with others in sharing insurance/financial plans and risks.

3.3.20 Probability. The likelihood or relative frequency of an event as expressed as a number between 0 and 1.

3.3.21 Risk. A measure of the probability and severity of adverse effects that result from an exposure to a hazard. [**1451,** 2013]

3.3.22 Risk Assessment. An assessment of the likelihood, vulnerability, and magnitude of incidents that could result from exposure to hazards.

3.3.23 Risk Control. The management of risk through stopping losses via exposure avoidance, prevention of loss (addressing frequency) and reduction of loss (addressing severity), segregation of exposures, and contractual transfer techniques.

3.3.24 Risk Financing. The aspect of risk management that provides ways to pay for losses.

3.3.25 Risk Management. The process of planning, organizing, directing, and controlling the resources and activities of an organization in order to minimize detrimental effects on that organization.

3.3.26 Third Party Administrator (TPA). An organization contracted by a self-insured employer to handle the administrative aspects of the employer's plan.

Chapter 4 Risk Management as a Function of Management

4.1* Concept of Risk. The fire and emergency service organization (FESO) should consider pure and speculative risks in the development of a risk management program.

4.2 Policy.

4.2.1 The FESO should have a written policy statement that clearly reflects its commitment to risk management through the development, implementation, and administration of a risk management program.

4.2.2* Where the FESO is not totally independent of a parent organization, the risk management program of the FESO should be developed in conjunction with that of the parent organization.

4.2.3 Where the FESO contracts with another entity, the risk management plan should be developed in conjunction with that entity.

4.2.3.1 The purpose of the risk management program should be to protect the assets and minimize the potential liability of the FESO in the most cost-effective manner by the following methods:

(1) Reducing the frequency and severity of losses (loss prevention)
(2) Providing equitable settlement of losses and defending against third-party claims (loss reduction)
(3) Limiting the effects of large, unexpected losses through risk transfer (insurance or contract)
(4) Leaving uninsured those risks that can be absorbed as operating expenses (self-insurance/retention)

4.3* The Function of Risk Management. Risk management should be an element of the overall management program of the FESO.

4.4* Risk Management Coordinator.

4.4.1 A risk management coordinator should be appointed and authorized by the FESO. The responsibility of the coordinator should be to develop, implement, evaluate, and update the risk management program.

4.4.2 The risk management coordinator should be knowledgeable about all aspects of the management and operation of the FESO.

4.4.3 The risk management coordinator should be assisted by those who have applicable expertise and knowledge of the FESO and related organizations.

4.5 The Risk Management Plan.

4.5.1* The risk management program should be documented in the risk management plan.

4.5.1.1 The risk management plan should be a formal, written document.

4.5.1.2 All alternatives and actions considered, whether implemented or not, should be documented.

4.5.2* The risk management plan should be distributed to agencies, departments, and employees having responsibilities designated in the plan.

4.5.3 A record should be kept of all holders of the risk management plan.

4.5.4 A system should be implemented for issuing all changes or revisions of the risk management plan to all holders.

4.5.5* The FESO should review the risk management plan at predetermined intervals or when the risk assessment changes.

4.6 Approval and Coordination. The risk management plan should be approved by the FESO through a formal, documented approval process and coordinated with participating agencies and organizations.

4.7 Governance and Administration. The FESO should consider laws, codes, standards, and recommended practices governing the development of a risk management program.

4.8* The Risk Management Process. The risk management process should consist of the following elements:

(1) Identifying and analyzing risk exposures *(see Chapter 5)*
(2) Evaluating risk handling alternatives *(see Chapter 6)*
(3) Handling the risk management technique selection *(see Chapter 7)*
(4) Implementing risk management techniques *(see Chapter 8)*
(5) Monitoring the risk management program *(see Chapter 9)*

Chapter 5 Identifying and Analyzing Risk Exposures

5.1 Risk Assessment. The FESO should conduct a risk assessment for the purpose of identifying and analyzing risks to the FESO, to those for whom it is responsible, and to those to whom it is accountable.

5.1.1 The risk assessment should consist of risk identification, risk analysis, and establishing priorities for action.

5.1.2 The risk assessment should be documented as described in Section 4.5, and the resulting records should be retained in the recommended manner after the risk assessment is concluded.

5.1.3 The risk assessment should be reviewed and revised on a scheduled basis, as operational or organizational changes occur and as indicated by postincident situation analyses conducted in accordance with Chapter 9.

5.2* Risk Identification. The risk assessment should identify existing and potential risks through an evaluation of operational activities, exposure situations, and prior loss experience.

5.2.1 The risk assessment should consider the following factors regarding the FESO:

(1) Territory and jurisdiction served
(2) Entity or segment of the public served
(3) Plans, policies, services, and operations
(4) Premises, apparatus, and equipment
(5) Personnel
(6) Compliance with applicable laws, codes, standards, and recommended practices

5.2.2 The risk assessment should include, but not be limited to, loss potentials arising in the following areas:

(1) Workers' compensation
(2) General liability
(3) Vehicles
(4) Property
(5) Criminal activity
(6) Professional liability
(7) Errors and omissions
(8) Directors and officers
(9) Environmental liability
(10) Aircraft/watercraft
(11)*Community service level
(12) Presumptive exposure
(13) Financial
(14) Disability
(15) Medical

5.2.3 The risk assessment should include data from the FESO's prior loss experience.

5.3 Risk Analysis.

5.3.1* The risks identified through the assessment procedure described in Section 5.2 should be evaluated by measuring their frequency, severity, and probability.

5.3.2 The risk analysis should employ techniques applicable to the type of loss exposure or hazard involved.

5.3.3* After evaluating the probability of a risk occurring and estimating its likely severity, the FESO should complete its risk assessment by weighing the relative significance of each risk.

5.4* Establishing Priorities. Based on the results of the risk analysis conducted as described in Section 5.3, the FESO should establish priorities for the order in which the risks should be addressed.

Chapter 6 Formulating Risk Management Solutions

6.1 Risk Management Solutions.

6.1.1 Risk management solutions should be formulated for each of the risks identified through the assessment procedure described in Chapter 5.

6.1.2 Risk management solutions should include determining and evaluating risk control techniques to reduce loss and risk-financing techniques to pay for loss.

6.2 Risk Control. Risk control techniques should include the following *(see also Annex B)*:

(1) Exposure avoidance
(2) Loss prevention
(3) Loss reduction
(4) Segregation of exposures
(5) Contractual transfer

6.3* Risk Financing. Risk financing techniques to be considered should include the following:

(1) Risk retention
(2) Risk transfer

6.3.1* Risk Retention. Current expensing of losses should be used to pay for small losses out of a general expense fund.

6.3.2 Risk Transfer.

6.3.2.1 Commercial insurance programs should be used to fund loss if the protection level desired is not met by contract or self-funding.

6.3.2.2* Basic determinations should include what type and what amount of coverage to obtain and at what retention level.

6.4 Managing Risk Through Claim Management.

6.4.1* A process should be in place to manage all claim activities once a loss occurs.

6.4.2* The process should start by a prompt reporting of the incident to the applicable organizations and documentation of the events surrounding the incident.

6.4.3* The claim analyst should be expected to investigate the claim, evaluate it, prepare a position, and begin negotiation of a settlement.

6.4.4 The negotiation should result in any of the following:

(1) Settlement or payment
(2) Denial
(3) Litigation

6.4.5* Subsequent to the results of these actions, rehabilitation, recovery, or salvage should be applied and performed, which typically brings the claim to closure.

6.4.6 Claim information should ultimately be used for loss analysis information identified in Section 5.2.

6.4.7* When personal injury occurs, management should ensure that the person returns to 100 percent physical capacity or as close as possible to it.

6.4.8* Disability management should typically address loss management using the following methods:

(1) Managing the loss (case management)
(2) Medical management (managed care)
(3) Vocational management
(4) Auditing of provider and hospital bills

6.4.9* Vocational management should be designed to enable an injured person to effectively return to routine gainful employment.

Chapter 7 Selecting Risk Management Solutions

7.1 Risk Management Solutions. For each risk identified through the assessment procedure described in Section 5.2, the FESO should select one or more risk management solutions based on the following:

(1) An understanding of the various risk management solutions that are available to control or finance the risk
(2) Identification of a desired goal or outcome

7.2* Forecast. The process should include a forecast of how each solution would affect the risk and attain the goal identified in Section 7.1.

Chapter 8 Implementing Risk Management Solutions

8.1 Implementation Plan.

8.1.1 A plan for implementing the risk management solutions as selected through the procedure described in Chapter 7 should be developed.

8.1.2 The components of the plan should include, but not be limited to, planning, preparation, and education and training.

8.2 Implementation.

8.2.1* Executing the Plan.

8.2.1.1 If, during the execution of the implementation plan, issues arise that affect the desired outcome, the plan should be modified.

8.2.1.2 All decisions that cannot be made immediately should initiate a specific action plan, with target dates, to allow for effective monitoring.

8.2.2* Preparation. Preparations should be made to allow all organizations and people affected by the solutions in question to be made aware of the solutions and their impact.

8.2.3* Education and Training.

8.2.3.1 Individuals involved in the implemented risk control solutions should be trained in their roles.

8.2.3.2 The education and training should include all applicable information about the solutions, as well as the intent behind them (what the solutions are trying to achieve).

8.2.4 Documentation. All steps of the decision-making process(es) should be documented in accordance with Chapter 4.

Chapter 9 Monitoring the Risk Management Program

9.1 Monitoring Program Effectiveness.

9.1.1* The results of the risk management program should be monitored through the regular collection and analysis of data and information about the efficiency, economics, and effectiveness of program elements.

9.1.2* The monitoring processes should provide information that allows the FESO to determine the effectiveness of the risk management program and the alternatives implemented.

9.2* Methods of Monitoring. Monitoring of the risk management program should include, but not be limited to, the following:

(1) Analysis of pertinent records, reports, and data
(2) Review of regulatory compliance programs
(3) Observations of operational performance

(4) Review of methods used to communicate risk awareness throughout the organization
(5) Periodic review of loss experience
(6) Analysis of financial impact

9.3* Frequency of Monitoring. The FESO should determine intervals for monitoring individual risk management components as well as the comprehensive program.

9.4 Roles and Responsibilities.

9.4.1 In general terms, monitoring the risk management program should be the responsibility of all members of the FESO and should be consistent with Section 4.5.

9.4.2* Specific program-monitoring responsibilities should be assigned to the person(s) at the appropriate level of FESO.

9.5* Continual Feedback and Action. Results of the monitoring activity should be used to update the FESO's risk management plan on a continuing basis.

Annex A Explanatory Material

Annex A is not a part of the recommendations of this NFPA document but is included for informational purposes only. This annex contains explanatory material, numbered to correspond with the applicable text paragraphs.

A.3.2.1 Approved. The National Fire Protection Association does not approve, inspect, or certify any installations, procedures, equipment, or materials; nor does it approve or evaluate testing laboratories. In determining the acceptability of installations, procedures, equipment, or materials, the authority having jurisdiction may base acceptance on compliance with NFPA or other appropriate standards. In the absence of such standards, said authority may require evidence of proper installation, procedure, or use. The authority having jurisdiction may also refer to the listings or labeling practices of an organization that is concerned with product evaluations and is thus in a position to determine compliance with appropriate standards for the current production of listed items.

A.3.2.2 Authority Having Jurisdiction (AHJ). The phrase "authority having jurisdiction," or its acronym AHJ, is used in NFPA documents in a broad manner, since jurisdictions and approval agencies vary, as do their responsibilities. Where public safety is primary, the authority having jurisdiction may be a federal, state, local, or other regional department or individual such as a fire chief; fire marshal; chief of a fire prevention bureau, labor department, or health department; building official; electrical inspector; or others having statutory authority. For insurance purposes, an insurance inspection department, rating bureau, or other insurance company representative may be the authority having jurisdiction. In many circumstances, the property owner or his or her designated agent assumes the role of the authority having jurisdiction; at government installations, the commanding officer or departmental official may be the authority having jurisdiction.

A.3.3.6 Emergency Services System. Figure A.3.3.6 is a representation of the components of a public emergency services program and was used as a template for this recommended practice.

A.3.3.9 Fire and Emergency Service Organization (FESO). A FESO can be a department within a larger entity, such as a municipal fire department that services a municipality, or an industrial fire department trained and equipped for specialized operations at a specific site owned by a private corporation. Alternatively, a FESO can be a separately incorporated entity such as a private-sector emergency medical services provider or a fire department incorporated as a nonprofit organization.

A.4.1 Risk is a characteristic of an entire probability distribution, with a separate probability for each outcome.

Risk is of two types, pure and speculative. Pure risk exists when there is a chance of loss but no chance of gain. Speculative risk exists when there is a chance of gain as well as loss.

The value of managing risk has several features, including the following:

(1) Survival
(2) Peace of mind
(3) Lowering the costs of risk and improving either profit or operating fund availability
(4) Stabilizing earning or cash flow
(5) Little or no interruption of operations
(6) Continued stability or growth
(7) Satisfaction of the organization's sense of social responsibility or desire for a good image

A.4.2.2 In many cases, the emergency services entity is not totally independent, but is a department within a larger public or private sector organization. Consequently, the risk management policy and program should be developed in conjunction with those of the parent organization so as to avoid conflict, duplication, or excessive costs. In many cases, medium to large public or private organizations have specialized risk management personnel who can be of assistance in developing the emergency service entity's risk management policy and program.

A.4.3 Risk management is a specialized field of management and, as such, shares many of the characteristics of the principles of general management of organizations. As a management function, risk management is directed toward the goals of the organization; requires the making and implementing of decisions; and is performed through the planning, organizing, directing, and controlling of others.

A.4.4 There are two primary types of decisions that have to be made in the implementation of risk management solutions. The first type is technical decisions. These are the decisions that determine the action that needs to be taken. For example, a solution to be implemented could be the purchase/replacement of personal alert safety systems (PASS) devices (to decrease the risk of members not being located if they become incapacitated). Some of the technical decisions can include the features to be included in the new devices, the recommended brand, and the policy to be established for their use. The FESO's Health and Safety Officer is frequently called upon to make technical decisions. However, this individual need not operate in a vacuum. Other members of the FESO should be consulted to ensure that all information is acquired and evaluated prior to a decision's being finalized.

The second type of decision for implementation of risk management solutions is managerial decisions. These are the decisions that determine how and by the whom actions will be taken. Using the preceding PASS example, some of the managerial decisions could include how and when the budget will allow for the purchase, the bidding process for obtaining them, and who will represent the FESO throughout the purchase process. These decisions will typically be the responsibility of a department administrator such as the fire chief. Some FESOs could also have someone such as a municipal risk manager who will be charged with this responsibility or who is available for consultation.

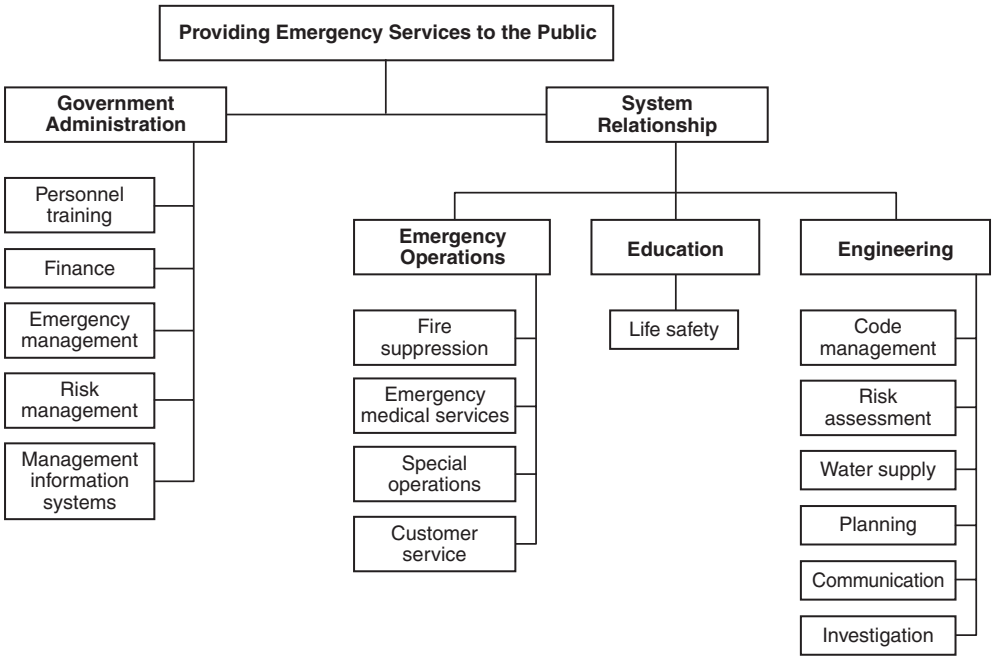

FIGURE A.3.3.6 Components of a Public Emergency Services Program.

A.4.5.1 Documentation is important so that the decisions that are made can be reconstructed and reviewed, if necessary. For example, an FESO could be facing an issue that has been previously addressed, but for multiple reasons members are unable to recollect why a particular decision was made. Another reason for maintaining clear documentation, although less likely to occur, is that there could be occasions when a particular risk management decision becomes part of a legal case. In such cases, attorneys need to follow the paper trail that leads to a particular decision that the FESO made.

A.4.5.2 In addition to interfacing with others within the parent organization, it will be necessary to work with those external to the organization, such as insurance brokers, agents, or consultants.

A.4.5.5 A risk management program is the end result of the risk management process, wherein exposures have been identified, risks evaluated, and a control plan implemented and monitored. The risk management plan is the written documentation of the risk management program.

A.4.8 Figure A.4.8 describes the steps in the risk management process.

A.5.2 The first step in risk identification is for the FESO to ascertain all of its actual or potential activities. The word *activities* is used here in the broadest sense and includes a consideration of the FESO's territory and jurisdiction; the entity or segment of the public it serves; and its plans, policies, services, operations, premises, apparatus, and equipment.

The next step in risk identification is for the FESO to identify those aspects of its activities that could produce undesirable consequences.

Undesirable consequences generally fall within the following three broad categories:

(1) Actual or threatened injury or damage to persons
(2) Actual or threatened loss of or damage to property
(3) Actual or threatened injury or damage to the environment

These undesirable consequences are sometimes referred to in the insurance industry and in risk management circles as loss exposures.

The three categories of undesirable consequences address the immediate effect of a detrimental event. Incidental or indirect effects are also possible for each category. These incidental effects can be classified as economic, legal, and political impacts.

After the FESO has listed the activities with which it is involved, it should identify the undesirable consequences that could potentially occur with respect to each activity. This activity can be accomplished by a methodical analysis that addresses, in turn, each category of injury, loss, or damage and then assesses the legal, economic, and political impacts likely to follow.

A.5.2.2(11) The concept of risk includes the level of service provided. The degree of risk accepted by the jurisdiction should be subject to local determination. This strategic planning process should be designed to evaluate the kind and level of fire risk in a community and to establish future objectives for minimizing or reducing that risk.

In addition, strategic planning should be utilized to develop a series of criteria to determine the levels of fire risk that will prevail in the community relative to the fire suppression resources to be maintained.

The fire department should maintain a periodically updated community fire risk analysis to identify the size and scope of the potential fire problem in order to determine the required number and deployment of fire companies. Every fire department should have a program under which its personnel regularly examine every part of the community where a significant fire problem might develop. Personnel should inspect real property in the community with an emphasis on those occupancies identified by a risk schedule as subject to a high level of hazard to life and property.

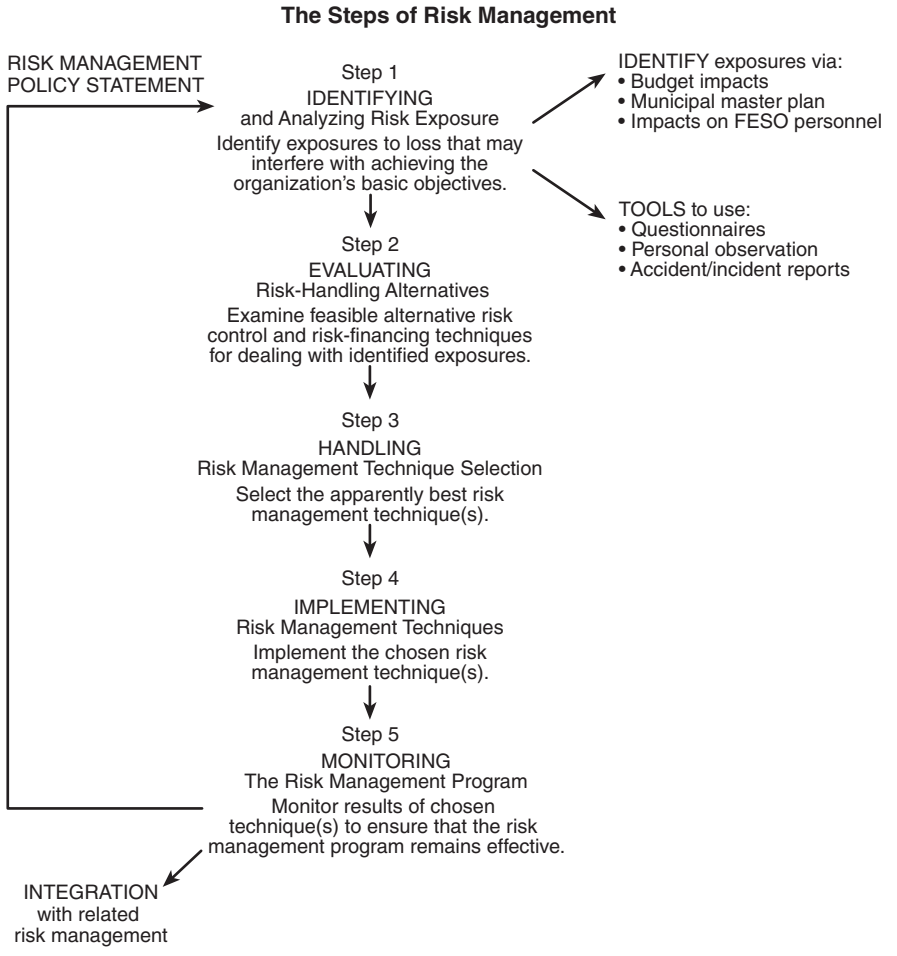

FIGURE A.4.8 Risk Management Flow Chart.

The number and type of units assigned to respond to a reported fire incident should be determined by risk analysis and pre-fire planning based on specific location or neighborhood.

As an integral part of the risk process, the fire department should develop and implement a public fire life safety education program to achieve or develop a level of fire safety awareness and attitude that assists the fire department in the management and reduction of the fire risk in the community.

There is a fundamental concept of fire risk associated with modern society. Public fire service organizations are expected to reduce the risk within their areas of jurisdiction by taking measures to do the following:

(1) Prevent the outbreak of fires
(2) Limit the extent and severity of fires
(3) Provide for the removal or rescue of endangered persons
(4) Control and extinguish fires that occur within the jurisdiction
(5) Perform other emergency response operations and delivery of emergency medical services

The cumulative effects of preventive efforts, risk reduction and control, and fire suppression capabilities result in variable levels of risk to the jurisdictions and their residents.

The risk remaining after deducting the cumulative effect of the public fire service organization's efforts is the responsibility of each individual, including owners, operators, occupants, and casual visitors to properties. It should be noted that fire risk cannot be completely avoided or eliminated.

The overall approach is comprehensive, because it examines the resources available for fire prevention and suppression, together with the level of risk created by the built environment under varying regulatory approaches. The assumption is that the need for public protection can be modified by increasing the required level of protection provided by the private sector in the form of fire alarm and detection systems and automatic sprinklers and by limiting the size and type of construction that is permitted. A desirable approach provides a low level of fire risk at a low overall cost, although the specific cost and risk levels are determined by local option.

The risk analysis also determines the needed staffing level. See the National Fire Academy publication "Evaluation and Planning of Public Fire Protection," Sections 7.2 and 7.29, for an example of fire suppression resources analysis; NFPA *Fire Protection Handbook*, Section 15, Chapter 2; and NFPA 1201.

A.5.3.1 A risk is evaluated by measuring its probability and severity. These factors can be translated into the following simple questions:

(1) How likely is the event to happen?
(2) When the event does occur, how severe are its adverse consequences?

A.5.3.3 The assessment of the relative significance of each risk will be useful to the next step in the risk management process, which is to evaluate and select risk-handling solutions.

A.5.4 The primary purpose of analyzing risks is to provide the FESO with some guidance for establishing priorities for action. Which risks should be addressed first and why?

Three factors are analyzed: frequency, severity, and probability. How likely is a risk to cause an undesirable consequence (probability)? How often has a risk caused an undesirable consequence in the past, or how often is it anticipated to cause one in the future (frequency)? How serious has the consequence been, or is it anticipated to be (severity)? Based on the answers to these questions, priorities for action can be established.

Judgment is vitally important when making these determinations. There is no universally accepted scale for frequency or severity. What could be considered unacceptable frequency or severity rates for one FESO could be acceptable to another. Factors such as size of FESO, tolerance for losses, and impact of past losses will affect judgment.

All three analysis factors need to be considered together when establishing priorities. Figure A.5.4 can be used as a worksheet for plotting frequency and severity. By viewing the various risks plotted on the chart and incorporating that information with the results of the probability determination, the FESO should be able to determine which risks to address first.

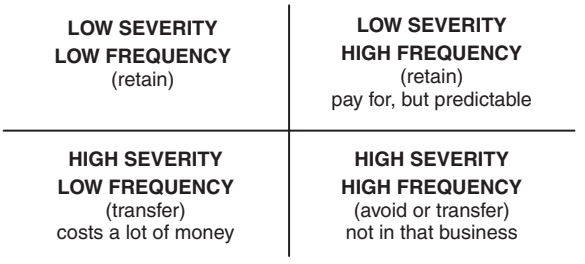

FIGURE A.5.4 Frequency–Severity Index Showing Financing Options.

A.6.3 Risk financing provides ways to pay for loss (financial). The organization's budget or other foundation documents will dictate how much and what will be retained. Funds originate with the organization itself, through a tax-based government nonprofit management or for-profit management.

The frequency–severity index in Figure A.5.4 is designed to help identify appropriate levels of risk and the corresponding type of financing action that is best suited for the exposure.

A.6.3.1 Unfunded reserves recognize loss potential, budget for it, and account for it. Unfunded reserves are not earmarked and are not on financial statements.

Funded reserves, which are reserves backed by earmarked funds, are typically protected, for example, trust accounts. Administrators of funded reserves can borrow from a bank or lending institution, earmarking the funds for loss payment as well as issuing bonds to pay for loss.

Captive insurers form an insurance company for their own purposes.

A.6.3.2.2 Table A.6.3.2.2(a) shows two cost models for self-insured risk (SIR) programs.

Table A.6.3.2.2(a) Cost Modeling

Model 1
Cost of primary insurance
+ Cost of umbrella (excess) insurance
+ Cost of collateralization requirement
= Net cost without retained losses
+ Retained losses within deductible
= Total cost of program
Model 2
Cost of excess coverage above SIR
+ Claim administration fees
+ Cost of loss deposit fund
= Net cost without retained losses or allocated claim expense
+ Allocated claim expense within SIR
+ Percent of allocated claims expense above SIR
+ Retained losses within SIR
= Subtotal cost of program
– Investment revenue on income
= Total cost of program

The insurance is purchased from an outside, unaffiliated insurer. Pools of insurance, similar to mutual insurance companies, exist under enabling legislation. Pools issue certificates that grant coverage similar to an insurance policy. Pools purchase reinsurance above their own retention level, are not protected by guaranteed funds, and are not subject to insurance regulation. Cost advantages include the following: there are no premium taxes, and there are no residual market loads. Pools, however, are assessable.

Insurance transfer is possible, typically through the creation of hold-harmless agreements that contractually transfer the financial responsibility to others, for example, through mutual aid agreements.

Retention of the risk is also possible by self-insuring, which can, however, place undue financial burden on organizations if not planned properly.

Insurance programs include the following types:

(1) First dollar (with a maintenance deductible)
(2) Deductible
(3) Self-insured retention
(4) Captive [alternative programs with either "single parent" or group (pools)]

Typical insurance issues to consider when purchasing from an outside organization include the following:

(1) The premium is paid in return for the promise to pay losses.
(2) There will be coverage limitations.
(3) There might be cash flow implications.
(4) Deductibles will be needed to handle loss frequency and nuisance losses.

(5) Based on immunities (if any), what limits of insurance should be purchased (should be based on exposure analysis)?
(6) There might be loss expenses outside the limits of the policy (e.g., noncovered litigation expenses, "noncovered costs").
(7) The claim payment philosophy should be understood (as well as the insurer's solvency and ability to pay claims and record of paying claims).
(8) What is the loss control service provided by the carrier?
(9) How competitive is the price?

Table A.6.3.2.2(b) provides a comparison of the characteristics of deductible and SIR plans.

A.6.4.1 A claims analyst (an internal or external person, depending on the risk-financing processes utilized) should be expected to investigate the claim, evaluate it, prepare a position, ensure involvement of the appropriate "network," and, if necessary, begin negotiation of a settlement.

A.6.4.2 The objective of managing the claims is to ensure quality care, manage costs, and facilitate re-entry into the workplace. Processes in place (e.g., managed case/care management) are designed to enable a single individual to oversee medical care. Through the medical management effort, that individual can resolve complications and deal with mounting bills from multiple physicians while attempting to reduce recovery time and achieve maximum improvement with minimal functional limitations, all while controlling medical costs by a careful audit of bills.

Depending on the results of those actions, rehabilitation, recovery, or salvage should be applied and performed, which typically moves the claim toward closure.

If an injured party cannot return to his or her routine job, alternative positions should be sought, the skills should be taught, and re-entry into a new job should take place.

Claim negotiation could be necessary, with that negotiation potentially resulting in the following:

(1) Settlement or payment
(2) Denial
(3) Litigation

Claim information should ultimately be used for loss analysis, as in Step 1 of the risk management process shown in Figure A.4.8.

The faster the process is implemented and used, the more efficient the cost containment.

A.6.4.3 The insurance carrier or TPA will confirm coverage, whereupon a file typically will be established and a claim analyst assigned.

A.6.4.5 The claim process is designed to compensate for losses found to be technically meritorious and to deny claims found to be inconsistent with the coverage's limits or other insurance contract parameters.

A.6.4.7 Rehabilitation is another form of cost containment known as disability management, which addresses the issue of control and reduction of excessive injury costs.

A.6.4.8 See A.6.4.2.

A.6.4.9 If an injured party cannot return to his or her routine job, alternative positions should be sought, the skills should be taught, and re-entry into a new job should take place. The goals are to have the employee return to work as well as to contain costs.

Table A.6.3.2.2(b) Comparison of Deductible and SIR Plans

Characteristic	Deductible Plan	SIR Plan
Customer policy premium	Higher, due to carrier provisions of allocated loss expense (ALE) within the deductible	Lower, due to insured responsibility for ALE within SIR
Customer administrative expense	Low, no claims handling involved	High, due to necessary claims management and legal expense reflected in the third party administrator (TPA) fee
Customer involvement in claims management, loss reserve funds, and litigation	No	Yes, but claims almost always managed through a TPA
Customer involvement in claims settlement	No	Might influence claims settlement through the TPA
Claims adjusted under the state insurance laws	Yes	Claims might not be subject to state law, and more efficient claims disposition might be possible
Collateralization	Yes, due to financial risk for the deductible reimbursement	No
Cash flow advantages to customer	Minor, since the insurer advances paid deductible losses to the claimant directly	Larger advantage, due to earnings on loss reserves and possible lower program expenses
Self-insurance certification	No	Required for auto liability in some states

A.7.2 For example, the most frequent type of vehicle accident occurs during backing up. The risk manager might want to realistically reduce such incidents by 75 percent. In studying the problem, the risk manager might decide to look at the following techniques:

(1) Avoidance (never back up)
(2) Prevention (use of a ground guide)

(3) Reduction (increased training, backup sensors)
(4) Noninsurance transfer (legislation creating immunity)
(5) Insurance transfer
(6) Retention (usually small costs, but with potentially high frequency; handle the cost as an expense to the organization)

The risk manager, in reviewing those options, might subjectively apply each technique to the problem area and choose the best technique based on the criteria of what is effective and economical. In the backing-up example, the risk manager can see that the problem of backing up a vehicle cannot be avoided; and it is doubtful that there can be legislative immunity for such actions.

Insurance or even retention are possibilities, if the costs associated with the frequency of the accidents and their impact on insurance premiums or retained funds are not a factor. Realistically, however, in addition to a needless expenditure of capital, there are other hidden costs (e.g., potential injuries and vehicle downtime).

The most effective and economical techniques in this instance are a combination of prevention and risk reduction. The risk manager can then request help in developing an organizational policy and training standard that reinforces the goal of accident reduction.

It should be noted that there are risks within the emergency services for which it might appear that the only factor to be considered is the one that is most effective. For example, a risk manager evaluating personal protective equipment might appear to disregard cost in order to obtain the best equipment to fit the needs of the emergency service. However, the most effective technique could also be the most economical after the total cost associated with injuries or death of an emergency worker is taken into account.

A.8.2.1 The implementation of chosen control techniques is only one part of a comprehensive plan. Factors to be considered include anticipated problems or hurdles, public and political questions and issues, length of time required for completion, and so forth. If factors change, the plan can and should be modified to ensure that the desired outcome is still achieved. As with any plan, time lines or target dates should be used to ensure that appropriate, timely action is taken and that progress, or lack of it, can be monitored.

A.8.2.2 During the decision-making process for the selection of solutions, all affected parties should be identified and, if appropriate, contacted and advised. That way, questions and problems can be addressed before any irreversible work has been performed.

A.8.2.3 The implemented risk control alternative most frequently will apply to the members of the FESO. If a new policy is adopted as a result of a risk management decision, the members need to understand the following:

(1) The policy's intent
(2) How to implement the policy
(3) The consequences for not following the policy

For example, say that due to a series of serious foot injuries during station maintenance activities, a fire department adopts a new policy stating that, effective immediately, all station work boots must have steel toes and steel shanks. The members must understand the following:

(1) The purpose behind the policy (to protect their feet)
(2) Their role in following the policy (Who will pay for the boots? Is there a required style or color that must be worn?)
(3) The consequences for working without the now required footwear (typically covered by the organization's personnel policy or contract)

Education and training will be even more important if the control measure involves learning how to use a new piece of equipment or a new technique to be employed at an emergency incident.

A.9.1.1 The monitoring process should identify program areas that are efficient and deficient, effective and ineffective, and should address elements that should be continued, revised, or deleted. *(See* NFPA 1500*.)*

A.9.1.2 The monitoring process should help managers improve implementation of policy and programs, allocate and limit the use of resources, and decide among policy, procedure, and levels of various activities.

A.9.2 The particular areas of the risk management program that will be monitored will vary with each organization. The following areas should be established in the risk management program:

(1) Examples of pertinent records and documents, training records, injury/illness records (workers' compensation), licenses and certifications, policies and procedures, standard operating guidelines (SOGs) and standard operating procedures (SOPs), financial records (budgets), and employee suggestions
(2) Review of regulatory compliance programs, following a checklist of requirements of each program
(3) Observations of operational performance means, to determine compliance with organizational expectations as outlined in organizational documents (policy/procedures)
(4) Methods of communicating risk awareness to determine whether the expected results of organizational communications are being met, as well as whether appropriate training needs are being accomplished
(5) Determination by each FESO of an interval within which to review all loss experience, with the analysis identifying developing loss trends and indicating the effectiveness of the current program/solutions or the need for additional solutions
(6) An analysis of financial expenditures conducted on a periodic basis (to be determined by the FESO), which will be used to evaluate the following:
    (a) Expenditure trends that might exceed financial plans
    (b) Potential catastrophic expenditures necessitating operating practice changes
    (c) Effective plan performance, and so forth

A.9.3 All elements of the risk management program should be evaluated on a regular basis to validate that the plan is current and effective. Evaluation should include, but not be limited to, the following:

(1) Elements of the risk management program that pertain to the occurrence of a significant event should be monitored (evaluated) immediately after the event.
(2) Elements of the risk management program that have preestablished monitoring frequencies should be conducted according to program/procedure guidelines.
(3) An annual comprehensive risk management program audit should be conducted. This annual audit should be conducted by person(s) of the organization responsible for recommending the development and modification of organizational policy and procedure.

Every three years, the risk management program should receive a comprehensive audit. This audit should be conducted by a TPA not employed or associated with the organization. Reported results and recommendations of the auditor should be reviewed and acted on by the person(s) assigned responsibility for maintaining the risk management program.

A.9.4.2 Throughout any organization, the empowerment of decision making with regard to carrying out instructions and documenting actions taken contains some individual decision-making responsibility. It is the outcomes of these decisions as documented that determine, through the monitoring processes, the overall status of the risk management program. Documents of activities performed include, but are not limited to, incident reports, accident/injury reports, loss reports, and financial documents.

A.9.5 Traditionally, it is the chain-of-command structure of the fire service that establishes certain and ultimate responsibilities. Most often it is members of the board of directors, the fire chief, and members of senior management who maintain ultimate organizational responsibility. Responsibility for the overall risk management program, given that the various aspects of the program encompass all operations of the organization, must be assigned to a senior official of the organization having both staff and line authority to change or modify organizational operations.

Annex B Risk Control

This annex is not a part of the recommendations of this NFPA document but is included for informational purposes only.

B.1 If an organization does not desire to expose itself to losses from a service it performs, then the organization can either abandon that service or choose not to undertake the service initially. (For example, if an FESO did not have the resources available to provide code inspection services for the municipality, then it would not agree to provide that service to the municipality. This arrangement would protect the FESO from professional liability claims in providing fire code inspections.)

B.2 Exposure Avoidance. Although abandonment or avoidance of a service to the community at times does not appear practical, the FESO should at least consider this technique as it formulates risk management techniques.

B.3 Loss Prevention. This risk control technique focuses on methods and measures that the FESO can take to prevent the probability of losses from occurring. This technique is used to prevent frequency of losses. (For example, driver training programs, both initial and recurring, communicate to members of the organization who drive emergency vehicles the correct methods, techniques, and laws they should follow when responding to emergencies.)

This risk control technique should be used in addressing each exposure to loss that the organization faces. (For example, prevention or mitigation of the frequency of losses also reduces the probability of the occurrence of a chance severe loss that could have a catastrophic effect on the organization's ability to provide service to the community.)

B.4 Loss Reduction. Loss reduction techniques focus on measures to be taken that would reduce the severity of a loss to the organization. (For example, having fire fighters wear personal protective ensemble during interior fire-fighting operations will help to reduce the severity of an injury to the fire fighter in the event of a flashover.)

Risk reduction techniques also include measures taken after an accident or loss has occurred that reduce the severity of the loss. (For example, an injured fire fighter is brought back to work as a dispatcher if his or her injuries do not allow the fire fighter to be involved in response to emergencies.)

Post-loss risk reduction techniques include the following:

(1) Salvage operations
(2) Rehabilitative activities
(3) Return-to-work programs
(4) Managed-care programs

These are just some of the techniques that can be used to reduce the severity of a loss after the loss has occurred.

Risk reduction techniques should be used in addressing individual risks and hazards that could cause so great a loss to the organization that the result would be detrimental to the organization's ability to continue to provide the promised service to the municipality.

Note that the usual method that an organization takes to address hazards and risks is to use a combination of loss prevention and loss reduction techniques. (For example, the risk to the organization from emergency response of vehicles is usually addressed by instituting a vehicle safety program that includes driver selection, driver training, and standard operating guidelines. The vehicle safety program includes both the loss prevention and the loss reduction techniques.)

B.5 Segregation of Exposures. This risk control technique uses the method of separating resources or assigning entities of the organization into smaller units so that a loss will affect only a percentage of the whole resource (for example, garaging emergency vehicles at a number of locations so that a fire at one facility does not have the potential to damage all of the organization's emergency vehicles).

Segregation is usually associated with a reduction in loss severity and therefore can be viewed as a special form of loss reduction.

B.6 Contractual Transfer. The risk control technique for contractual transfer is an agreement under which one party (transferor) shifts to another (transferee) the loss exposures associated with an activity. The transferee is required by contract to perform certain activities. There is no indemnity or other compensation between the transferor and the transferee.

Contractual transfer shifts both legal and financial responsibility for any accidental losses arising out of that activity. (For example, the fire department does not desire to expose itself to medical malpractice claims. The fire department transfers this service to independent emergency medical services, which will contractually provide the service for the municipality.)

Annex C Insurance Checklists

This annex is not a part of the recommendations of this NFPA document but is included for informational purposes only.

C.1 Figure C.1 is provided as an example of a checklist for an FESO to follow.

C.2 Figure C.2 shows a sample checklist from Delaware Valley Insurance Trust — Delaware Valley Worker's Compensation Trust.

C.3 The checklists in Figure C.1 and Figure C.2 were developed based on a need defined by the membership and officials of the International Association of Fire Chiefs and on research conducted by IAFC Risk Management and Liability Committee.

Checklist of Property and Liability Insurance Coverages for Fire and Emergency Service Organizations

General Liability

Is there a general liability policy issued (proposed) in the name of the emergency service organization? _____

If not, is the organization an insured under another policy, such as a municipality? _____

Is your policy issued on a claims-made or occurrence basis? _____

Amounts of liability insurance

- Bodily injury and property damage $ _____
- Each occurrence limit $ _____
- Personal injury and advertising injury limit $ _____
- Fire damage legal liability limit $ _____
- Medical expense limit $ _____
- Products/completed operations aggregate $ _____

General aggregate limit $ _____

Are defense costs paid in addition to the total limit liability? _____

Are all volunteers and employees, whether or not a member of your organization, covered as insureds? _____

Would members of your emergency service organization be protected as individuals for a lawsuit brought against them by another employee or member as a result of bodily injury arising out of emergency activities? _____

Are the following liability coverages included?

- Are intentional acts covered/provided for bodily injury or property damage arising out of actions you may take to protect persons or property? _____
- Are coverage provided for claims brought by persons receiving your services, for the theft/damage/disappearance of their personal property while in your care, custody, or control? _____
- Host liquor liability _____
- Liquor law liability _____
- Non-owned watercraft liability _____
- Owned watercraft liability _____

Is pollution liability coverage provided for completed operations? _____

Is pollution liability coverage (other than storage tank spillage/leakage) provided for premises? _____

Is pollution liability coverage provided for off-premises operations? _____

Is pollution liability coverage (including clean- up costs) provided for storage tank spillage/ leakage on an EPA-approved policy? _____

Medical Malpractice

Is there a medical malpractice policy issued (proposed) in the name of the emergency service organization? If not, is the organization an insured under another policy, such as a municipality? _____

Is medical malpractice coverage subject to the same limits as general liability? _____

Is medical malpractice coverage afforded for each volunteer/employee as well as the emergency service organization? _____

Is medical malpractice coverage afforded for each volunteer/employee or just those who are certified paramedics, EMTs, or individuals who have completed a course in first aid training? _____

Is medical malpractice coverage included for all active volunteer members and employees while they are at the scene of an emergency and acting as a "Good Samaritan" independent of your organization? _____

Is medical malpractice coverage provided for the organization while your volunteers/employees are performing duties on your behalf in a hospital emergency room? _____

Is medical malpractice coverage included for nurses who are members of your organization and responding on behalf of your organization? _____

Are both the general liability and medical malpractice coverages provided by the same insurance company? _____

Is there a deductible? _____

Are medical directors (physicians) covered for any "hands-on" medical care they may provide on your behalf? _____

Are defense costs paid in addition to the total limit of liability? _____

Are medical directors (physicians) covered for liability arising out of the administrative duties they may perform as your medical director? _____

Directors and Officers/Errors and Omissions Liability

Is there an error and omissions policy issued (proposed) in the name of the emergency service organization? If not, is the organization an insured under another policy such as a municipality? _____

Amount(s) of liability insurance _____

Is there an annual aggregate limit? _____

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FIGURE C.1 Checklist of Property and Liability Insurance Coverages for Emergency Service Organizations.

Checklist of Property and Liability Insurance Coverages for Fire and Emergency Service Organizations *(Continued)*

Are all members (both paid and volunteer) included as insureds? _____

Is your policy issued on a claims-made or occurrence basis? _____

Is coverage included for fiduciary claims as a result of your responsibilities as a director or officer of the insured organization? _____

If on a claims-made basis, does your policy have a retroactive date (incidents occurring before the date would not be covered) or does your policy provide full prior acts coverage? _____

Are defense costs paid in addition to the total limit of liability? _____

Does your policy provide coverage for claims arising out of the administration of employee (or volunteer) benefit plans? _____

Are civil rights claims covered, such as discrimination, defamation, sexual harassment, and so forth? _____

Is there reimbursement for the costs of defending claims seeking injunctive relief, where the plaintiff does not ask for money damages but asks the court to force the organization either to take some action or to stop taking some action? _____

If yes, what limit? _____

Are employees or volunteers covered for any liability they may incur while serving on the board of directors of nonprofit organizations related to emergency service? _____

Automobile Liability

Amounts of liability insurance $ _____

Is there an annual aggregate limit? $ _____

Combined single limit bodily injury and property damage per occurrence, or bodily injury liability per person/per occurrence. $ _____

Property damage liability occurrence $ _____

Is coverage provided for liability arising out of the organization's use of any auto (look for covered auto symbol 1 on your policy)? _____

Are members also given liability protection for the operation of their own vehicles while using them on behalf of the emergency service organization? _____

Would a volunteer/employee be protected by a lawsuit brought against him/her by another member as a result of bodily injury arising out of the use of a department vehicle? _____

Automobile Physical Damage

Coverage is provided on emergency apparatus on the following basis:

Actual cash value $ _____

Stated amount $ _____

Agreed value $ _____

In the settlement of a claim, is there any deduction made due to depreciation of emergency apparatus? _____

Is coverage provided for damage to a member's automobile as a result of an accident while using the vehicle on behalf of the organization? _____

If so, up to what limit? _____

Are you allowed to choose an amount of coverage equal to the vehicle's replacement cost? _____

Does the policy include a coinsurance clause requiring the emergency service organization to purchase a minimum amount of insurance or suffer a penalty in the settlement of a partial loss? _____

What are the deductibles?

Comprehensive $ _____

Collision $ _____

Is coverage provided for hired, borrowed, or commandeered vehicles? _____

If yes:

- Is there a dollar limit? _____
- What deductibles apply? _____

Is coverage included for loss caused by freezing of special equipment? _____

Is towing and labor coverage provided to respond when apparatus breaks down, even though there has been no accident? _____

Is coverage provided for damages to property (such as radio) owned by the organization but permanently installed in a volunteer's or employee's vehicle? _____

Real and Personal Property

Location _____ Building $ _____

Contents $ _____

Location _____ Building $ _____

Contents $ _____

Location _____ Building $ _____

Contents $ _____

Location _____ Building $ _____

Contents $ _____

FIGURE C.1 *Continued*

Checklist of Property and Liability Insurance Coverages for Fire and Emergency Service Organizations *(Continued)*

Is coverage provided on an actual cash value, replacement cost, or guaranteed replacement cost basis? _____

Building $ _____

Contents $ _____

Is the property insured on a named peril or all risk basis? _____

Is an automatic increase in insurance percentage included for buildings and contents? _____

Is coverage included for property not owned by the emergency service organization that is commandeered during the course of an emergency operation? _____

If yes, up to what limit? $ _____

Is earthquake coverage included? _____

Is flood coverage (including backup of sewers and drains) included? _____

Is there building ordinance coverage to pay for the possible increased costs of construction as a result of local building codes, state codes, or the Americans with Disabilities Act? _____

Do you have coverage for loss of income and extra expense resulting from direct loss to covered property? _____

If yes, is there a dollar limit or is the organization covered for the actual loss sustained? _____

Is your computer hardware and software covered? _____

Is there coverage for the loss of personal effects of individuals on your premises: _____

If yes, what limit? $ _____

Is the organization covered for loss of money (or securities)? _____

If yes, what limit? $ _____

Portable Equipment

Is coverage provided on an actual cash value, replacement cost, or guaranteed replacement cost basis? _____

Is the property insured on a named peril or all risk basis? _____

Do you have blanket coverage, or is it limited to scheduled items? _____

Deductible? $ _____

Is coverage included for personal effects of members during emergency activities? _____

If so, how much? $ _____

Is coverage provided for equipment you do not own that is furnished to the organization for your regular use? _____

Is coverage provided for equipment belonging to others that you borrow for temporary use? _____

If yes, what limit? $ _____

Is coverage provided for watercraft? _____

If yes, are there any size/value/horsepower restrictions? _____

Other Coverages	Current	Propose/Required
Umbrella liability		
Boiler and machinery		
Fidelity/Surety bonds		
Other (_____)		

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FIGURE C.1 *Continued*

Risk Sharing Pool Evaluation Checklist
Delaware Valley Insurance Trust — Delaware Valley Worker's Compensation Trust

Issue _____

Category _____

Review _____

I. Bylaws & Trust Agreement	Check	Date	Initial
A. *Length of Commitment*	☐		
B. *Coverages*	☐		
• Coverage offered	☐		
• Minimum coverages required of each participant	☐		
C. *Trustee Involvement*	☐		
• How many	☐		
• How appointed	☐		
• Indemnification provisions	☐		
• Number of meetings per year	☐		
D. *Administration*	☐		
• By broker, employee, or nonprofit association	☐		
• How paid: fixed cost or percent	☐		
• Indemnification or administrator by trustee	☐		
E. *Assessments*	☐		
• Unlimited vs. percent of contribution	☐		
• How allocated	☐		
• Any actual assessment history	☐		
• Coverage lines affected or applied overall	☐		
F. *Withdrawal and Termination*	☐		
• Penalties for withdrawal	☐		
• Loss of portion of surplus	☐		
• Loss of portion of dividends	☐		
G. *Eligibility Criteria*	☐		
• Limitations by population	☐		
• Limitations by charter	☐		
• Limitations by geographic region	☐		
H. *Loss Control Requirements & Services*	☐		
• Seminars, surveys, newsletters	☐		
• Inspections	☐		
• Regulatory requirements	☐		
• Incentive programs	☐		
I. *Regulation*	☐		
• By whom	☐		
• How extensive	☐		
• Reporting requirements	☐		

II. Financial	Check	Date	Initial
A. *Financial Statements*	☐		
• Pro forma vs. actual audited	☐		
• Surplus history	☐		
• Reserves & Incurred But Not Reported (IBNR) reflected on discounted or undiscounted basis	☐		
• Surplus to retained limit ratio	☐		
• Dividend history and philosophy	☐		
• Government Accounting Standards Bureau (GASB) 10 required notes to financial	☐		
• Auditor's management letter	☐		
• Stable contribution history	☐		
B. *Investments*	☐		
• Interest income history	☐		
• Investment portfolio	☐		
• Control of investments	☐		
• Restrictions on investments	☐		
• Use and application of investment income	☐		
• Need for minimum return of investment	☐		
C. *Funding*	☐		
• Confidence level for expected losses — current year	☐		
• Confidence level for expected losses — past years	☐		
• Who is actuary	☐		
• Review of expected losses & IBNR by actuary; how often	☐		
• Set own rates or rely on Insurance Services Organization (ISO) or National Council on Compensation Insurance (NCCI)	☐		
• Funding for occurrence, claims-made or claims-paid coverage	☐		
D. *Tax Status*	☐		
• Tax exempt from federal and state taxes	☐		
• Exempt from premium taxes	☐		
E. *Fees to Regulators*	☐		
• How determined	☐		
• How much	☐		

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FIGURE C.2 Risk-Sharing Pool Evaluation Checklist.

Risk Sharing Pool Evaluation Checklist
Delaware Valley Insurance Trust — Delaware Valley Worker's Compensation Trust

II. Financial *(continued)*

	Check	Date	Initial
F. *Reinsurance / Excess*	☐		
• Retained limit per coverage line	☐		
• Per occurrence limits	☐		
• Financial stability of reinsurer	☐		
• Retained limit history	☐		
• Any retention in excess layers	☐		
• Scope of coverage entirely reinsured	☐		

III. Underwriting

	Check	Date	Initial
A. *Standards*	☐		
• Standards in writing	☐		
• Is it a homogeneous group	☐		
• Is there an underwriting manual	☐		
• Is there a summary of exposures for all members	☐		
• Is it a true risk-sharing arrangement	☐		
• Are there deductible or retention options available	☐		
B. *Underwriter*	☐		
• In-house or by contract	☐		
• How is the underwriter paid	☐		
• Incentives offered to underwriter for good loss experience	☐		
• Experience and credentials of underwriter	☐		
• Loss history	☐		
C. *Rating*	☐		
• Use pool history and/or prior carrier(s)	☐		
• How long before applying experience to rates	☐		
• Range of credits and debits	☐		
D. *Contributions*	☐		
• History for comparable members	☐		
• Expectations for new members	☐		
E. *Losses*	☐		
• Actual group loss history compared to expected losses	☐		
• Ability to terminate or eliminate member with poor loss record	☐		

IV. Coverage and Claims Adjustment

	Check	Date	Initial
A. *Property*	☐		
• ISO vs. Highly Protected Risk (HPR) vs. manuscript forms	☐		
• Deductibles	☐		
• Compare terms and conditions	☐		
B. *Liability*	☐		
• Commercial General Liability (GL) vs. manuscript	☐		
• Annual aggregate limitation	☐		
• Deductibles	☐		
• Occurrence vs. claims-made vs. claims-paid	☐		
• How does coverage compare with current form	☐		
• Do limits include, or in addition to, defense costs	☐		
C. *Claims Administrator*	☐		
• In-house vs. third party	☐		
• Claims adjusting philosophy	☐		
• Adjuster's experience	☐		
• Case loads	☐		
• Member input	☐		
• Risk management information system	☐		
• Are claims audits performed on a periodic basis	☐		
D. *Defense*	☐		
• Who selects defense counsel	☐		

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FIGURE C.2 ***Continued***

Annex D Risk Management Plan Factors

This annex is not a part of the recommendations of this NFPA document but is included for informational purposes only. This annex is extracted from Annex D of NFPA 1500.

D.1 Essentially, a risk management plan serves as documentation that risks have been identified and evaluated and that a reasonable control plan has been implemented and followed.

Some factors to consider for each step of the process are listed in D.1.1 through D.1.6.

D.1.1 Risk Identification. For every aspect of the operation of the fire department, list potential problems. The following are examples of sources of information that could be useful in the process:

(1) A list of the risks to which members are or can be exposed
(2) Records of previous accidents, illnesses, and injuries, both locally and nationally
(3) Facility and apparatus surveys, inspections, and so forth

D.1.2 Risk Evaluation. Evaluate each item listed in the risk identification process using the following two questions:

(1) What is the potential frequency of occurrence?
(2) What is the potential severity and expense of its occurrence?

This will help to set priorities in the control plan. Some sources of information that could be useful are the following:

(1) Safety audits and inspection reports
(2) Prior accident, illness, and injury statistics
(3) Application of national data to the local circumstances
(4) Professional judgment in evaluating risks unique to the jurisdiction

D.1.3 Establishment of Priorities for Action. Determining the frequency and severity of occurrence of risks will serve as a method for establishing priorities. Any risk that has a low probability of occurrence but will have serious consequences (high risk) deserves immediate action and would be considered a high-priority item. Non-serious incidents with a low likelihood of occurrence are a lower priority and can be placed near the bottom of the "action required" list.

D.1.4 Risk Control. Once risks are identified and evaluated, a control for each should be implemented and documented. The two primary methods of controlling risk, in order of preference, are as follows:

(1) Wherever possible, totally eliminate/avoid the risk or the activity that presents the risk. For example, if the risk is falling on the ice, then do not allow members to go outside when icy conditions are present.
(2) Where it is not possible or practical to avoid or eliminate the risk, steps should be taken to control it. In the example in D.1.4, some methods of control would be sand/salt procedures, the wearing of proper footwear, and so forth.

D.1.5 Other Methods of Control. Other methods of control to consider are the following:

(1) Safety program development, implementation, and enforcement
(2) Standard operating procedures development, dissemination, and enforcement
(3) Training
(4) Inspections

D.1.6 Risk Management Monitoring and Follow-Up. As with any program, it is important to evaluate whether the plan is working. Periodic evaluations should be made, and, if the program elements are not working satisfactorily, then modifications should be made.

D.2 Figure D.2 shows a sample risk management plan.

[ANYTOWN] FIRE DEPARTMENT RISK MANAGEMENT PLAN

Purpose

The *[Anytown]* Fire Department has developed and implemented a risk management plan. The goals and objectives of the plan are as follows:

(1) To limit the exposure of the fire department to situations and occurrences that could have harmful or undesirable consequences on the department or its members

(2) To provide the safest possible work environment for the members of the fire department, while recognizing the risks inherent to the fire department's mission

Scope

The risk management plan is intended to comply with the requirements of NFPA 1500, *Standard on Fire Department Occupational Safety and Health Program*.

Methodology

The risk management plan uses a variety of strategies and approaches to address different objectives. The specific objectives are identified from the following sources of information:

(1) Records and reports on the frequency and severity of accidents and injuries in the *[Anytown]* Fire Department

(2) Reports received from the *[Anytown]* Fire Department's insurance carriers

(3) Specific occurrences that identify the need for risk management

(4) National trends and reports that are applicable to *[Anytown]*

(5) Knowledge of the inherent risks that are encountered by fire departments and specific situations that are identified in *[Anytown]*

(6) Any additional areas identified by fire department staff and personnel

Responsibilities

The fire chief has responsibility for the implementation and operation of the department's risk management plan. The department's health and safety officer has the responsibility to develop, manage, and annually revise the risk management plan. The health and safety officer also has the responsibility to modify the risk management plan when warranted by changing exposures, occurrences, and activities.

All members of the *[Anytown]* Fire Department have responsibility for ensuring their own health and safety based upon the requirements of the risk management plan and the department's safety and health program.

Plan Organization

The risk management plan includes the following:

(1) Identification of the risks members of the fire department could actually or potentially encounter, both emergency and non-emergency

(a) Emergency risks include those presented at emergency incidents, both fire and non-fire (e.g., hazardous materials), Emergency Medical Services incidents, and emergency response.

(b) Non-emergency risks include those encountered while performing functions such as training, physical fitness, non-emergency vehicle operation, and station activities (e.g., vehicle maintenance, station maintenance, daily office functions).

(2) Evaluation of the identified risks based upon the frequency and severity factors

(3) Development and implementation of an action plan for controlling each of the risks, in order of priority

(4) Provisions for monitoring the effectiveness of the controls implemented

(5) A periodic review of the plan with modifications made as needed

The plan requires a monitoring process which may be done by the health and safety committee or the health and safety officers.

Risk Management Plan Monitoring

(1) The *[Anytown]* Fire Department's risk management program will be monitored annually, in January, by the health and safety officer.

(2) Recommendations and revisions will be made based on the following criteria:

(a) Annual accident and injury data for the preceding year

(b) Significant incidents that have occurred during the past year

(c) Information and suggestions from department staff and personnel

(3) Every 3 years, the risk management program will be evaluated by an independent source. Recommendations will be sent to the fire chief, the health and safety officer, and the occupational safety and health committee.

FIGURE D.2 Sample Risk Management Plan.

Annex E Informational References

E.1 Referenced Publications. The documents or portions thereof listed in this annex are referenced within the informational sections of this recommended practice and are not part of the recommendations of this document unless also listed in Chapter 2 for other reasons.

E.1.1 NFPA Publications. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471.

NFPA 1201, *Standard for Providing Fire and Emergency Services to the Public*, 2015 edition.

NFPA 1500, *Standard on Fire Department Occupational Safety and Health Program*, 2013 edition.

Fire Protection Handbook, 20th edition.

E.1.2 Other Publications.

E.1.2.1 United States Fire Administration Publications. National Fire Academy, 16727 S. Seton Avenue, Emmitsburg, MD 21727.

"Evaluation and Planning of Public Fire Protection," Sections 7.2 and 7.29.

E.2 Informational References. The following documents or portions thereof are listed here as informational resources only. They are not a part of the recommendations of this document.

E.2.1 ISO Publications. International Organization for Standardization, 1, ch.de la Voie-Creuse, Case postale 56, CH-1211 Geneva 20, Switzerland, www.iso.ch

ANSI/ASSE/IEC/ISO 31010 (Z690.3 - 2011), Risk Assessment Techniques.

ANSI/ASSE/ISO 31000 (Z690.2 - 2011), Risk Management Principles and Guidelines.

ANSI/ASSE/ISO Guide 73 (Z690.1 - 2011), Vocabulary for Risk Management.

E.2.2 Other Publications.

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Williams, C. A., and R. M. Heins. *Risk Management and Insurance*. New York: McGraw-Hill, 1981.

E.2.3 Organizations. The following organizations can be contacted for further information on insurance practices.

The Institutes
720 Providence Road, Suite 100
Malvern, PA 19355
800-644-2101

NFPA Publications
National Fire Protection Association
1 Batterymarch Park
Quincy, MA, 02169-7471

617-770-3000

Public Risk Management Association (PRIMA)
700 S. Washington Street
Suite 218
Alexandria, VA 22314
703-528-7701

The Risk Management Society
1065 Avenue of the Americas, 13th floor
New York, NY 10018
212-286-9292
212-986-9716 (FAX)

E.3 References for Extracts in Informational Sections. NFPA 1500, *Standard on Fire Department Occupational Safety and Health Program*, 2013 edition.